Pat.Appln.Nr 09/872,990 Docket 437-01US

Proposed amendments to claims
as submitted following telecon w examiner 01 June 2004

Claims now amended: 1,29
Claims now cancelled: (none)
New claim now added: 33
Preferred order of claims: 1,11,12.14-19,29,31,30,32,33

1 (currently amended). A method for reducing sludge viscosity of a sewage sludge having a solids concentration of at least ten percent by weight, being sewage sludge that, prior to use of the method, is so viscous as to be non-pumpable, the method comprising:

[2] (a) increasing the pH of the sludge to the range of 9.5 to 11.5;

[3] (b) maintaining the sludge at the pH of (a) and at a temperature of 10°C to 37°C for a period of at least one day;

[4] (c) incubating the sludge by maintaining the resultant sludge at a temperature in the range of 40°C to 100°C for a period of time of at least one hour;

[5] (d) subjecting the sludge to such physical shearing or disintegration[~~, of such vigour and duration~~] as to transform the sludge from being non-pumpable to being pumpable;

[6] (e) subsequently discharging the sludge;

[7] and carrying out the step (d) no later than simultaneously with the step (c).

2-10 (cancelled).

11 (original). The method of claim 1 in which the solids concentration of at least ten percent is obtained using a screw press, belt press or a centrifuge.

12 (previously presented). The method of claim 1 in which the sludge pH is adjusted to at least 10.5.

13 (cancelled).

14 (original). The method of claim 1 in which the sludge is held in

step (c) at a temperature and for a time sufficient to eliminate microbial pathogens.

15 (original). The method of claim 1 in which the pH is increased using a mono or divalent hydroxide.

16 (original). The method of claim 15 in which the pH is increased using lime.

17 (original). The method of claim 1 in which some or all of the shearing of step (d) is effected by the action of pumps.

18 (original). The method of claim 1 in which at least one of the treatments occurs in a batch procedure.

19 (original). The method of claim 1 in which at least one of the treatments occurs in a continuous procedure.

20-28 (cancelled)

29 (**currently amended**). Method of claim 1, wherein the shearing is done vigorously enough to ensure substantial reduction of particle size and physical [~~breakdown of cells, thereby releasing water from the cells.~~] breakup of agglomerates of particles in the sludge.

30 (previously presented). Method of claim 1, including carrying out the step (d) sequentially after the step (a).

31 (previously presented). Method of claim 29, wherein the shearing is done using a rotating toothed disc or impeller, having a tip speed of 1000 to 10,000 feet/minute.

32 (**currently amended**). Method of claim 1, wherein the sludge having a solids concentration of at least ten percent by weight is sludge that has been de-watered from a lower solids concentration, and wherein the step of de-watering includes passing the sludge through at least one of: a screw press; a belt press; a centrifuge; or a filtration unit.

33 (**new**). Method of claim 1, including starting step (d) after the

temperature of the sludge exceeds 40 deg C and after the pH of the sludge exceeds 9.5